

310 CMR 7.29 CO₂ Implementation: Discussion Draft



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History of MassDEP power plant CO₂ regulations

- 310 CMR 7.29 CO₂ standards finalized May 11, 2001
 - Annual CO₂ “cap” limit in each facility’s 310 CMR 7.29 Emissions Control Plan approval dated June 7, 2002
 - Annual CO₂ “rate” limit of 1800 lbs CO₂/MWh



Each facility's annual CO₂ cap (tons) as approved June 7, 2002

Brayton	8,585,152
Canal	5,331,820
Mt. Tom	1,117,569
Mystic	7,596,390
Salem Harbor	4,286,053
Somerset	916,586

The caps were determined as specified in 310 CMR 7.29; generally, the average of 1997, 1998 and 1999 CO₂ emissions.



Annual CO₂ “cap”

- Takes effect calendar year 2006
- Compliance calculated each calendar year as difference between:
 - cap (tons) and
 - year’s actual CO₂ emissions (tons)



Annual CO₂ “rate”

- Takes effect calendar year 2008
- Compliance calculated each calendar year as difference between:
 - 1800 lbs/MWh times year’s MWh divided by 2000 lbs/ton and
 - year’s actual CO₂ emissions (tons)



Why today's proposal?

- The April 2001 Statement of Reasons stated, “DEP will also allow the use of off-site reductions and carbon sequestration to comply with the CO₂ emission cap and emission rate. DEP plans to propose modifications to 310 CMR 7.00 Appendix B in the future to allow CO₂ emissions trading for compliance purposes.”
- Today's proposal modifies Appendix B, with conforming amendments to 310 CMR 7.29.



GHG Credits created through:

- Avoided Emissions
- Reduced Emissions
- Sequestered Emissions



Proposed GHG Credit Application Process

- A facility subject to 310 CMR 7.29 applies to MassDEP for greenhouse gas (GHG) Credits:
 - Prospectively for projects contemplated for the future, providing greater certainty that a contemplated project will be found acceptable, or
 - Retrospectively for projects already implemented



Criteria for Certification & Verification

- Real
- Additional
- Verifiable
- Permanent to the maximum extent feasible
- Enforceable as a practical matter



Proposed GHG Credit Certification & Verification Process

- MassDEP will assess GHG Credit applications against criteria on previous slide
- MassDEP may simultaneously certify & verify GHG Credits, for projects already implemented
- MassDEP may separately
 - certify contemplated GHG Credits and
 - verify actual GHG Credits after implementation
- Certified GHG Credits must be verified by time of use



Proposed Initial Geographic Scope

- Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont, or
- Jurisdictions that have a carbon constraining program approved by MassDEP



Proposed Eligible Project Categories

- Reductions in landfill gas emissions beyond reductions already required,
- Sulfurhexafluoride (SF₆) capture and recycling,
- Afforestation, and
- Natural gas/heating oil/propane end-use energy efficiency projects.
- Additional credit types may also be approved.



Proposed Ineligible Project Categories

- Nuclear power generation,
- Under-water and under-ground sequestration, and
- Over-compliance with the cap and rate limitations in 310 CMR 7.29 by affected facilities.
 - The April 2001 Statement of Reasons prohibited over-compliance at one affected facility from being used for compliance by another affected facility.



Proposed Flexibility Mechanisms

- Offset Trigger Price (initially \$6.50/ton CO_{2e})
- Trust Trigger Price (initially \$10/ton CO_{2e}) – Safety Valve
- Circuit Breaker Mechanism



Offset Trigger Price

- If:
 - average calendar year price of GHG Credits rises above \$6.50/ton CO_{2e}, or
 - there are insufficient GHG Credits available for purchase,
- Then affected facilities may apply for:
 - projects that occur anywhere on Earth, and
 - certification of CO₂ allowances and CO_{2e} credits from any Department-approved allowance or credit system
- Once triggered, always triggered



Trust Trigger Price – Safety Valve

- If:
 - average calendar year price of GHG Credits rises above \$10/ton CO_{2e},
- Then:
 - affected facilities may make payments into a “GHG Expendable Trust”
- Payment into Trust only allowed as long as price remains above \$10/ton (on an annual basis)



GHG Expendable Trust is intended to:

- Reduce CO₂ in the atmosphere
- Fund projects, purchase greenhouse gas credits, or purchase and retire allowances
- Acquire the maximum amount of GHG reductions at the lowest cost
- Massachusetts-based reductions preferred



Circuit Breaker Mechanism

- If:
 - price substantially exceeds either the Offset or Trust Trigger Price, or
 - insufficient GHG Credit applications received,
- Then, after public comment, MassDEP Commissioner may:
 - expand the geographic scope from which applications will be accepted, or
 - allow payments into the GHG Expendable Trust



Transition Provisions

- For 2006 & 2007 only: Certified GHG Credits accepted for compliance, but
- Must be Verified by 12/31/08



Other Provisions

- GHG Credit applications submitted by affected facilities only
- GHG Credits may be used for 310 CMR 7.29 compliance only
- Applications must generate at least 5000 tons of GHG Credit
- Applications must document price paid per ton
- MassDEP Program review conducted in 2010 and every 5 years thereafter



Proposed 7.29 Conforming Amendments

(1 of 2)

■ Change:

- “off-site reductions or sequestration” to
- “emission reductions, avoided emission, and sequestered emissions”

■ So that:

- An incentive to implementing desirable projects at an affected facility, such as erecting a wind turbine, is created



Proposed 7.29 Conforming Amendments

(2 of 2)

■ Change:

- “real, surplus, verifiable, permanent, and enforceable, as defined at 310 CMR 7.00: Appendix B” to
- “real, additional, verifiable, permanent to the maximum extent feasible, and enforceable as a practical matter”

■ So that:

- GHG term of art “additional” replaces “surplus”
- existing Appendix B requirement that “permanent” and “enforceable” be federally enforceable does not apply to GHG Credit certification



Process

- Public Comment period starts with Public Notice publication in newspapers later this week
- Four Public Hearings - 30 days after Public Notice published
 - 1/17/06 TBD, western MA
 - 1/18/06 6pm MassDEP SERO
 - 1/19/06 6pm MassDEP NERO
 - 1/20/06 9am MassDEP Boston
- Public Comment period open until 1/31/06
- Response to Comment and final regulations expected early in 2006



To be added to mailing list or
submit public comments:

- E-mail to sharon.weber@state.ma.us